Claims

1. A single layered or laminated biaxially oriented film comprising an aromatic polyester (a) and a polyolefin (b) having a melting point of from 230 to 280°C, wherein

the ratio of the polyolefin (b) is from 2 to 60% by weight based on the entire weight of the film, and the film thickness is from 1 to 10 μm.

2. A biaxially oriented film according to claim 1, wherein the biaxially oriented film is a single layered film comprising a thermoplastic resin composition (c) of the aromatic polyester (a) and the polyolefin (b).

3. A biaxially oriented film according to claim 1, wherein the biaxially oriented film is a laminated film, at least one layer of said laminated film is a film layer A comprising a thermoplastic resin composition (c) of the aromatic polyester (a) and the polyolefin (b), and a film layer B comprising the aromatic polyester (a) is laminated to at least one surface of said film layer A.

4. A biaxially oriented film according to claim 3, wherein the film layer A comprises a thermoplastic resin composition (c') of from 5 to 95% by weight of the aromatic polyester (a) and from 5 to 95% by weight of the polyolefin (b), and the thickness of the film layer A is from 5 to 95% based on the thickness of the laminated film.

5. A biaxially oriented film according to claim 1, wherein the biaxially oriented film is a laminated film, at least one layer of said laminated film is a film layer C comprising the polyolefin (b) and a film layer B comprising the aromatic polyester (a) is laminated on at least one surface of said film layer C.

6. A biaxially oriented film according to claim 1, wherein the aromatic polyester (a) is polyethylene-2,6-naphthalene dicarboxylate.

7. A biaxially oriented film according to claim 1, wherein the polyolefin (b) has at least one of the characteristic of a dielectric constant of less than 3.0 and a dielectric loss of less than 0.001.

8. A biaxially oriented film according to claim 1, wherein the polyolefin (b) is a syndiotactic styrene polymer.

9. A biaxially oriented film according to claim 2 or 3, wherein the polyolefin (b) in the film layer comprising the thermoplastic resin composition (c) is dispersed in an island shape and the average length thereof in the MD direction is 20 μm or less.

10. A biaxially oriented film according to claim 9, wherein the thermoplastic resin composition (c) further comprises a thermoplastic amorphous resin (d) having a solubility parameter between the aromatic polyester (a) and the polyolefin (b) by from 0.1 to 10% by weight based on the thermoplastic resin composition.

11. A biaxially oriented film according to claim 10, wherein the thermoplastic

amorphous resin (d) is selected from the group consisting of an acrylic acid copolymerized polyolefin and a vinyl oxazoline copolymerized polyolefin resin.

12. A biaxially oriented film according to claim 3, wherein the biaxially oriented film is a three layered film wherein the film layers B are laminated on both surfaces of the film layer A.

13. A biaxially oriented film according to claim 3, wherein the film layer A and the film layer B are laminated at least by four layers as the total number of the layers.

14. A biaxially oriented film according to claim 5, wherein the biaxially oriented film is a three layered film wherein the film layers B are laminated on both surfaces of the film layer C.

15. A biaxially oriented film according to claim 5, wherein the film layer C and the film layer B are laminated at least by four layers as the total number of the layers.

16. A biaxially oriented film according to claim 1, wherein the humidity expansion coefficient in the width direction of the film is from 0.1×10^{-6} to 13×10^{-6}%/RH%.

17. A biaxially oriented film according to claim 1, wherein the temperature expansion coefficient in the width direction of the film is from -5×10^{-6} to 15×10^{-6}%/°C.

18. A biaxially oriented film according to claim 1, wherein the Young's modulus both in the film forming direction and in the width direction of the film is 5 GPa or more and the total for both of them is 22 GPa at the greatest.

19. A biaxially oriented film according to claim 1 or any one of claims 16 to 18 used as a base film for a magnetic recording medium.

20. A magnetic recording medium comprising a biaxially oriented film according to any one of claim 1 or claims 16 to 18, and a magnetic layer disposed on one surface thereof.

21. A biaxially oriented film according to claim 1, wherein the breakdown voltage exceeds 400 V/μm and the heat resistant temperature is 110°c or higher.

22. A biaxially oriented film according to any one of claim 1, or claim 16 or 21 used as a base film for a film capacitor.

23. A film capacitor comprising a biaxially oriented film according to any one of claim 1, claim 16 or claim 21 and a layer D comprising an oxygen atom-containing compound disposed at least on one surface thereof in which the thickness of the layer D to the entire thickness of the film and the layer D is 30% or less and the (oxygen atom/carbon atom) ratio at the surface of the layer D measured by X-ray photoelectron spectroscopy is 10% or more.

24. A film capacitor comprising a biaxially oriented film according to any one of

claim 1, claim 16 or claim 21 and a metal layer disposed at least on one surface thereof.